

An **SAIC** company

r.e. wright environmental, inc.

May 1, 1995

Mr. J. C. White
Blake Construction Co., Inc.
1150 Connecticut Ave., NW
Washington, DC 20036-4104

Re: Soil Sample Analyses Results for
Samples Collected at Rogers
Electric Site
REWEI Project M95239

Dear Mr. White:

On April 12, 1995, R. E. Wright Environmental Inc. (REWEI) collected six surface soil samples at the Rogers Electric site in Cheverly, Maryland. The sampling was performed in response to a positive analysis for polychlorinated biphenyls (PCBs) in a soil sample previously collected in the same area by Environmental Protection Agency (EPA) personnel.

The sampling configuration used by REWEI was intended to confirm the presence of a small localized PCB contaminated area in the northwest corner of the site. A total of six samples were collected as shown on the attached field sketch.

Each sample location was identified in the field with a wire flag. Dedicated sampling spoons were used to collect each sample. The sampling technician worked under Level D protocol. The samples were placed in 125 ml sample jars with teflon lined lids. Each jar was labeled and logged on a chain-of-custody form and submitted to Maryland Spectral Services, Inc. (MSSI) for analyses. All samples were analyzed for the presence of PCBs by U.S. EPA Methods 3540/8080 using capillary chromatography. A copy of the analyses report is attached.

Based on the results of the laboratory analyses, detectable concentrations of PCBs were present in the samples analyzed. Sample S-4 collected from the same area as the EPA's most contaminated sample corroborates their finding of approximately 2,000 parts per

Mr. J.C. White

2

May 1, 1995

million (ppm). Two samples collected from outside the fenced area (S-5 and S-6) were found to be contaminated with 20,000 ppm PCB and 11.5 ppm PCB, respectively. Also, as shown on the attached figure, the EPA sample collected from outside the fence (RE-1) was found to contain 3.6 ppm PCB.

The results of REWEI's current sampling and analyses effort confirm that PCB contamination exists in the northwest corner of the site. Additional sampling is needed to better define the contaminated area. To effect that delineation, REWEI recommends the collection and laboratory analysis of ten samples as shown on the attached sketch. The recommended sampling is intended to confirm that PCB contamination is below 10 ppm in the new sample locations. Should that result be confirmed, we will excavate the area within the new sample point locations to remove residual PCB contamination in this corner of the site.

Should you have questions or wish to discuss this, don't hesitate to call me at (410) 876-0280.

Sincerely,

R. E. WRIGHT ENVIRONMENTAL, INC.



Timothy N. Gardner
Project Manager

Reviewed and Approved by:

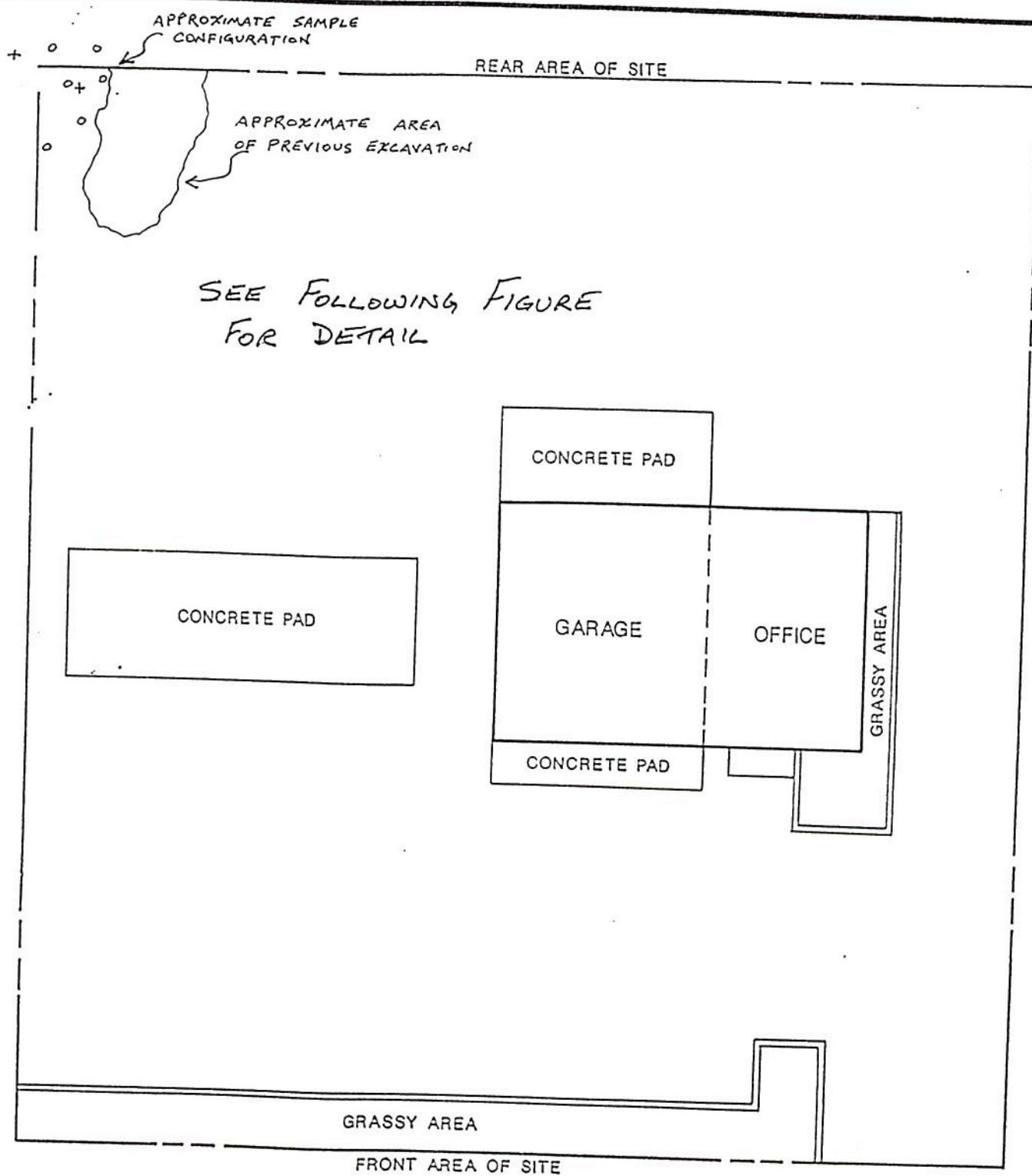


Steven P. Hughes
General Manager
Maryland Office

TNG:aea
Attachment

M1995\5239L1

r.e. wright environmental, inc.



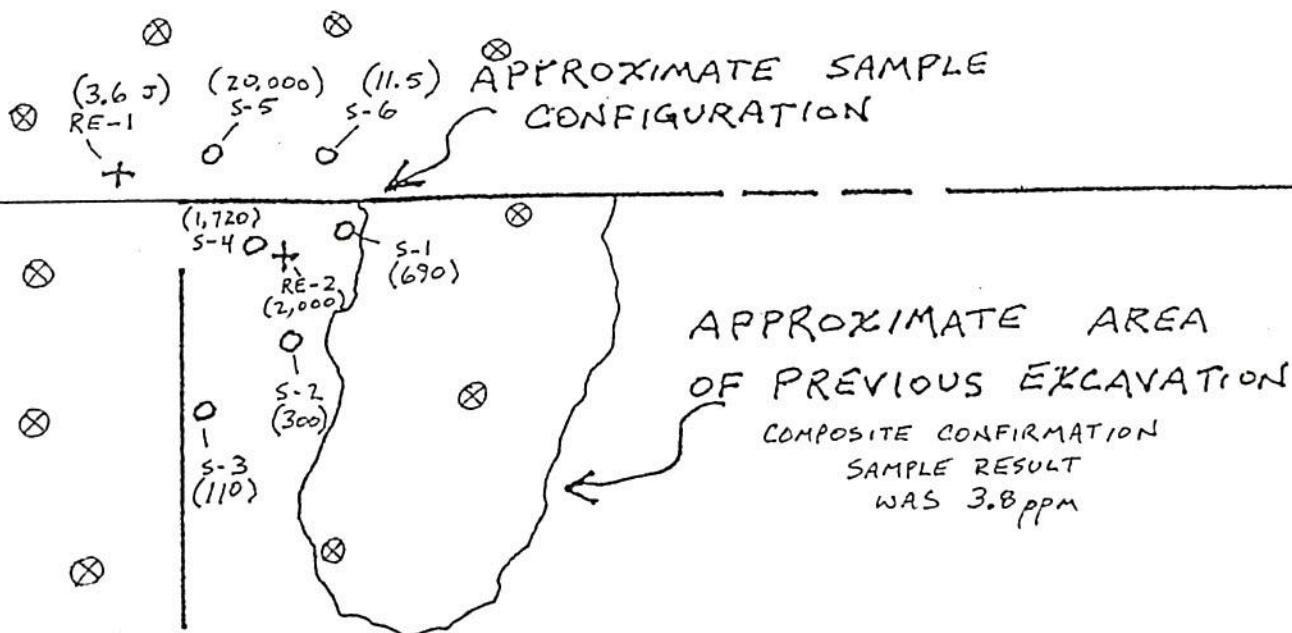
SEE FOLLOWING FIGURE
FOR DETAIL

LEGEND

- + - SAMPLE COLLECTED BY EPA
- o - SAMPLE COLLECTED BY RENEI

BLAKE CONSTRUCTION CO., INC.		
ROGERS ELECTRIC SITE MAP		
drawn <i>TNA</i>	approved	drawing no.
checked	date <i>5/1/95</i>	<i>M95239-A</i>
<i>r.e. wright associates, inc.</i> earth resources consultants		

BEAVERDAM CREEK

BLAKE
CONSTRUCTION

ROGERS ELECTRIC SITE

LEGEND

- + - SAMPLE COLLECTED BY EPA
- O - SAMPLE COLLECTED BY REWEI
- ⊗ - PROPOSED SAMPLE LOCATION
- (110) - CONCENTRATION PCB'S IN PPM

BLAKE CONSTRUCTION
CO., INC.

SAMPLE POINT LOCATION MAP

drawn TNG	approved	drawing no.
checked	date 5/1/85	M95239-B

R.e. wright associates, inc.
earth resources consultants
midlothian, pa monroe, pa pemberton, md

MARYLAND SPECTRAL SERVICES, INC.

1500 CATON CENTER DRIVE, BALTIMORE, MD 21227

(410) 247-7600

REC'D

APR 21 1995

LABORATORY RESULTS

MD REWAI

RESULTS OF ANALYSIS OF THE
BLAKE SOIL SAMPLES
COLLECTED 12 APRIL 1995

PROJECT 95239

Prepared For
R. E. WRIGHT ENVIRONMENTAL, INC.
WESTMINSTER, MD

19 April 1995

SAMPLE DATA SUMMARY PACKAGE

Table of Contents

1. Narrative
2. Chain-of-Custody Records
3. Results of Analyses
4. Chromatograms of Samples and Method Blanks

1. Narrative

NARRATIVE

Laboratory Name: Maryland Spectral Services, Inc. (MSS)

Date Samples Delivered to MSS Laboratory: 14 April 1995

Project: Blake; #95239

Project Manager: Mr. Tim Gardner

Results for the following samples are included in this data package:

Client ID	MSS ID	Matrix	Analysis
S1	950414-17	Soil	PCBs (8080)
S2	950414-18	Soil	PCBs (8080)
S3	950414-19	Soil	PCBs (8080)
S4	950414-20	Soil	PCBs (8080)
S5	950414-21	Soil	PCBs (8080)
S6	950414-22	Soil	PCBs (8080)

The Polychlorinated Biphenyls (PCBs) analyses were performed by U.S. EPA Methods 3540/8080 (Soxhlet/GC/ECD) using capillary chromatography. Fifteen grams of each sample was extracted in a Soxhlet apparatus. The extracts were taken to a final volume of 10 mL and analyzed by GC/ECD.

Results of analysis are presented in Section 3 and are reported as milligrams per kilogram (parts per million) on a dry-weight basis.

All sample preparations and analyses were completed within the required holding time limitations.

Each sample, standard, and blank was spiked with the surrogate compound dibutyl chlorethane (DBC) to monitor method performance. Results of surrogate recoveries are presented in Section 3.

Chromatograms of samples and method blank analyses are provided in Section 4.

RELEASE OF THE DATA CONTAINED IN THIS HARDCOPY DATA PACKAGE HAS BEEN AUTHORIZED BY THE LABORATORY MANAGER OR HIS DESIGNEE, AS VERIFIED BY THE FOLLOWING SIGNATURE:

Michael M. Robison DATE: 19 Apr 95
Michael M. Robison 19 April 1995

2. Chain-of-Custody Records

DATE ORDERED: 1/7

AIN OF CUSTODY RECORD

DATE REQUESTED: 1/1

REPORT TO:

R.E.Wright Environmental
125 Airport Dr. #310
Westminster, MD

BILL TO:

Same as above.

CONTACT	Tim Gardner	PHONE NO.	876-0280	SALESMAN
PROJECT NAME	Blake	PROJECT NO.	95239	P.O. NO.
DATE SAMPLED	4/12/95	SAMPLER(S)	RDT	

ANALYSES TO BE PERFORMED

TIME OF SAMPLING
TOTAL NO. OF CONTAINERS
PCB SC50

SAMPLE DESCRIPTION/LOCATION	TIME OF SAMPLING	TOTAL NO. OF CONTAINERS	PCB SC50	ANALYSES TO BE PERFORMED										REMARKS	
				MET	Hg	As	Cr	Fe	Ni	Co	Al	Si	Ca	Mg	
1 Soil S1	0935	1	X												
2 Soil S2	0925	1	X												Ice
3 Soil S3	0950	1	X												Ice
4 Soil S4	0932	1	X												Ice
5 Soil S5	0945	1	X												Ice
6 Soil S6	0945	1	X												Ice
7															
8															
9															
10															

REMARKS:

SHIPPING CARRIER:

SHIPPING TICKET NUMBER:

CHAIN-OF-CUSTODY SEAL:

INTACT BROKEN ABSENT

RELINQUISHED BY: <i>Karen D. Taylor</i>	DATE 4/17/95	TIME 1100	RECEIVED BY: RENEI - REF.	DATE	TIME	RELINQUISHED BY: <i>Stacy J. Chey</i>	DATE 4/14/95	TIME 1207
RECEIVED BY: <i>L.V. Miller</i>	DATE 4/17/95	TIME 1207	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
RELINQUISHED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME

3. Results of Analyses

MARYLAND SPECTRAL SERVICES, INC.
1500 Caton Center Drive Baltimore, MD 21227

PCBs BY EPA METHODS 3540/8080 (MODIFIED)

CLIENT SAMPLE ID:	SOIL S1 BLAKE	SOIL S2 BLAKE	SOIL S3 BLAKE	SOIL S4 BLAKE	SOIL S5 BLAKE	SOIL S6 BLAKE
LAB SAMPLE ID:	95041417	95041418	95041419	95041420	95041421	95041422
SAMPLE DATE:	04/12/95	04/12/95	04/12/95	04/12/95	04/12/95	04/12/95
RECEIVED DATE:	04/14/95	04/14/95	04/14/95	04/14/95	04/14/95	04/14/95
EXTRACTION DATE:	04/14/95	04/14/95	04/14/95	04/14/95	04/14/95	04/14/95
ANALYSIS DATE:	04/18/95	04/18/95	04/18/95	04/18/95	04/18/95	04/18/95
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
PERCENT MOISTURE:	22 %	6 %	16 %	38 %	30 %	17 %
UNITS:	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG
DILUTION FACTOR:	1,000	400	100	1,000	10,000	10

COMPOUND (Results are reported on a dry-weight basis.)

Aroclor-1016	130	U	42.6	U	11.9	U	160	U	1430	U	1.20	U
Aroclor-1221	130	U	42.6	U	11.9	U	160	U	1430	U	1.20	U
Aroclor-1232	130	U	42.6	U	11.9	U	160	U	1430	U	1.20	U
Aroclor-1242	130	U	42.6	U	11.9	U	160	U	1430	U	1.20	U
Aroclor-1248	130	U	42.6	U	11.9	U	160	U	1430	U	1.20	U
Aroclor-1254	130	U	42.6	U	11.9	U	160	U	1430	U	1.20	U
Aroclor-1260	<u>690</u>		<u>300</u>		<u>110</u>		<u>1720</u>		<u>20000</u>		<u>11.5</u>	

Surrogate Recovery (DBC) DL DL DL DL DL ME

NOTE: Due to peak interference from Aroclor-1260 surrogate recovery for sample SOIL S6 could not be determined.

U - Below Reported Quantitation Level
MG/KG - Milligram per Kilogram
DL - Surrogate Diluted Out
ME - Matrix Effect

MARYLAND SPECTRAL SERVICES, INC.
1500 Caton Center Drive Baltimore, MD 21227

PCBs BY EPA METHOD 8080 (MODIFIED)

CLIENT SAMPLE ID: METHOD BLANK
LAB SAMPLE ID: PS-BLK14
SAMPLE DATE:
RECEIVED DATE:
EXTRACTION DATE: 04/14/95
ANALYSIS DATE: 04/17/95
MATRIX: SOIL
UNITS: MG/KG
DILUTION FACTOR: 1

COMPOUND

Aroclor-1016	0.10	U
Aroclor-1221	0.10	U
Aroclor-1232	0.10	U
Aroclor-1242	0.10	U
Aroclor-1248	0.10	U
Aroclor-1254	0.10	U
Aroclor-1260	0.10	U
Surrogate		
Recovery (DBC)	115	%

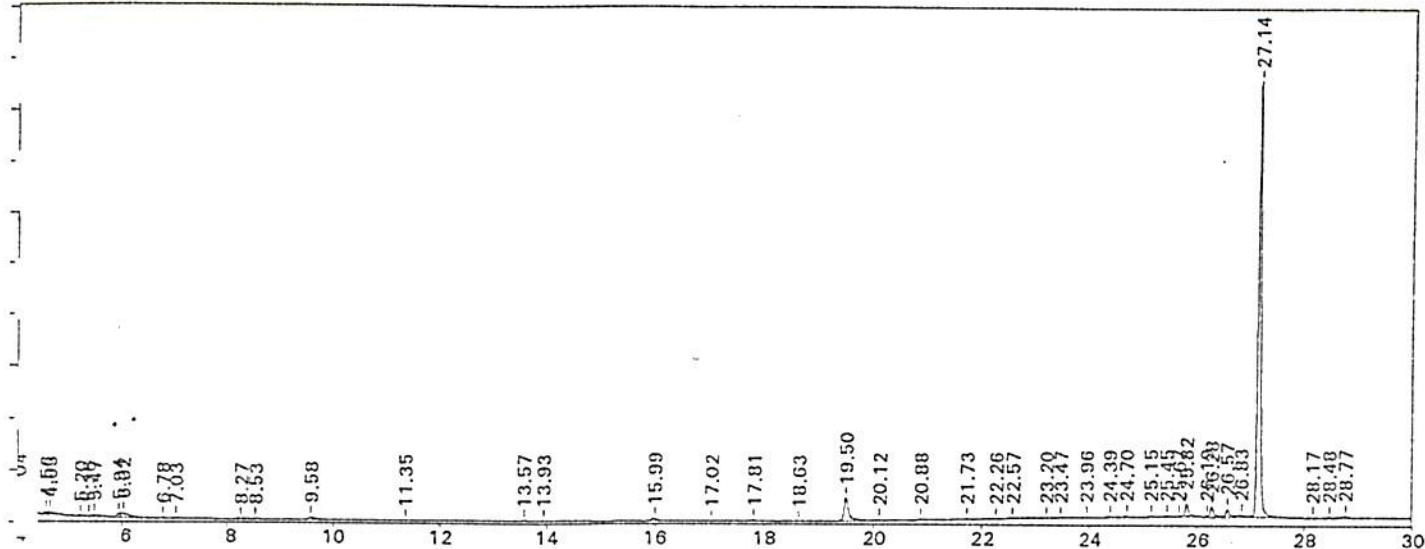
U - Below Reported Quantitation Level
MG/KG - Milligram per Kilogram

4. Chromatograms of Samples and Method Blanks

File=C:\DIRECT\DATAB1\0417B.15R Date printed=04-17-1995 Time= 22:33:57

Sample Name=PSBLK14

to 30.0 min. Low Y=126.631 High Y=293.279 mv Span=166.648



***** MARYLAND SPECTRAL SERVICES, INC. *****

SAMPLE NAME: PSBLK14
ANALYSIS DATE: Apr 17, 1995 22:33:55
OPERATOR: KD
INSTRUMENT ID: GC-B--ECD
METHOD FILE: C:\DIRECT\DATAB1\RUN.MET
RAW DATA FILE NAME: C:\DIRECT\DATAB1\0417B.15R
RUN TIME: 30

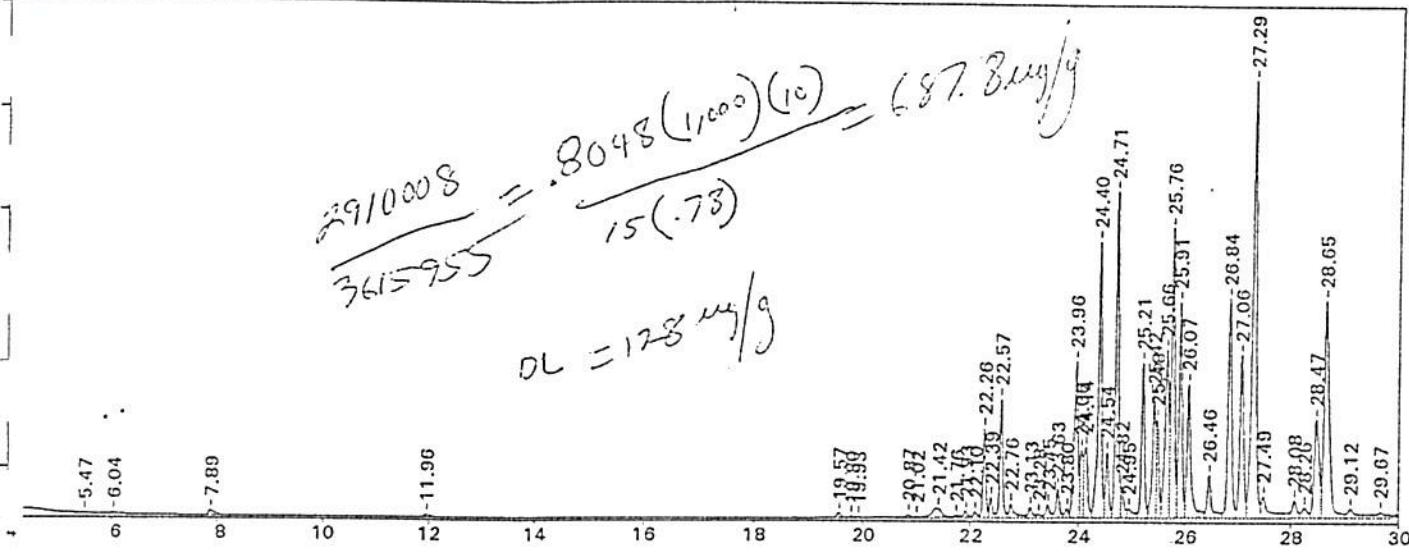
DILUTION FACTOR: 1 RTX-35 30m x 0.25mm 2uL INJ
AMOUNT INJECTED: 1 PCB BY 8080 MODIFIED

53270? = 115% relative
163.760

***** PEAKS DETECTED IN THIS CHROMATOGRAM *****

Peak #	Ret Time (min)	Compound Name	Peak Type	Peak Area	Peak Height
1	4.035		BB	11239	907
	4.555		BV	2882	767
	4.627		VB	7703	878
4	5.203		BV	1215	208
5	5.363		VV	738	163
6	5.471		VB	6148	455
7	5.943		BV	5008	1222
8	6.021		VB	16823	1304
9	6.785		BB	499	82
10	7.026		BB	1530	140
11	8.265		BV	1244	156
12	8.533		VB	2283	250
13	9.578		BB	8314	743
14	11.345		BB	740	101
15	13.570		BV	2348	238
16	13.933		VB	1279	169
17	15.989		BB	6907	911
18	17.023		BB	1240	168
19	17.813		BB	2459	371
20	18.631		BB	466	91
21	19.500		BV	49642	7454
22	20.118		VB	1986	369
23	20.880		BB	769	201
24	21.733		BB	473	115
25	22.259		BB	312	86
26	22.568		BV	406	113

File=C:\DIRECT\DATAB1\0417B.41R Date printed=04-18-1995 Time= 15:30:27
 Sample Name=950414-17 1/1,000
 0 to 30.0 min. Low Y=127.117 High Y=336.864 mv Span=209.747



***** MARYLAND SPECTRAL SERVICES, INC. *****

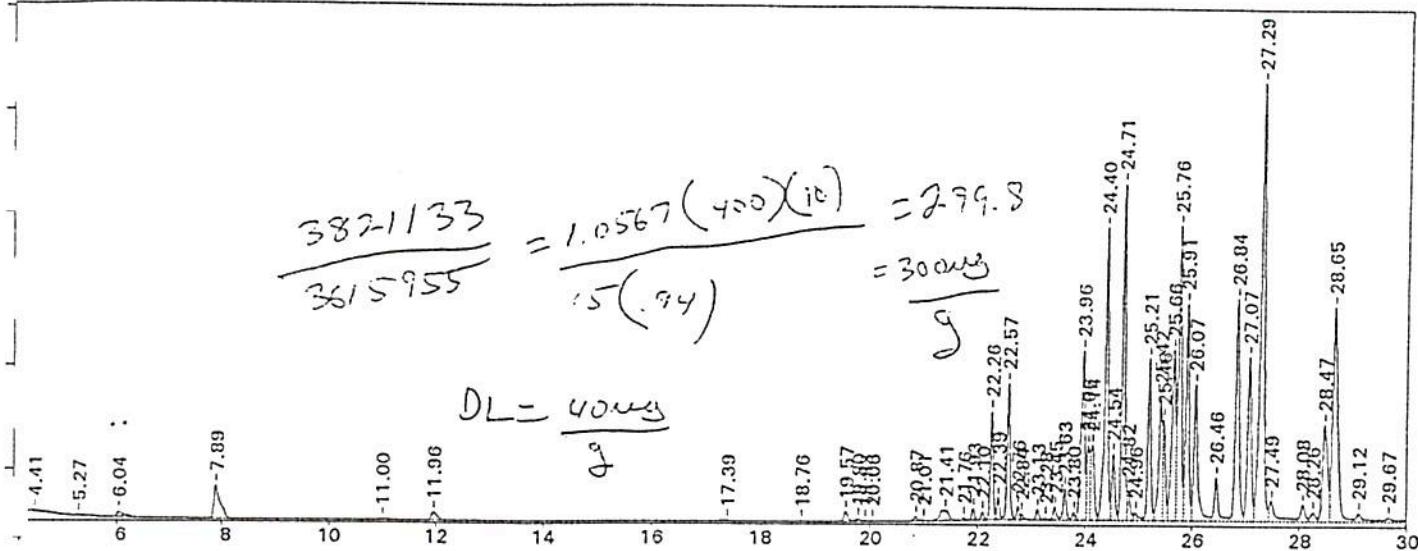
* SAMPLE NAME: 950414-17 1/1,000
 * ANALYSIS DATE: Apr 18, 1995 15:30:25
 OPERATOR: KD
 INSTRUMENT ID: GC-B--ECD
 * METHOD FILE: C:\DIRECT\DATAB1\RUN.MET
 * RAW DATA FILE NAME: C:\DIRECT\DATAB1\0417B.41R
 RUN TIME: 30
 * DILUTION FACTOR: 1 RTX-35 30m x 0.25mm 2uL INJ
 * AMOUNT INJECTED: 1 PCB BY 8080 MODIFIED

***** PEAKS DETECTED IN THIS CHROMATOGRAM *****

Peak #	Ret Time (min)	Compound Name	Peak Type	Peak Area	Peak Height
1	5.473		BB	1577	188
	6.036		BB	6982	585
	7.888		BB	17351	1995
4	11.963		BB	7474	961
5	19.567		BV	9766	1935
6	19.797		VV	2057	406
7	19.927		VB	624	150
8	20.867		BV	5593	1066
9	21.016		VV	1776	330
10	21.420		VV	46147	3570
11	21.759		VV	3818	668
12	21.929		VV	11779	2436
13	22.102		VV	9415	2061
14	22.264		VV	130542	35373
15	22.392		VV	29860	7873
16	22.573		VV	182803	46990
17	22.764		VV	28964	5317
18	23.127		VV	19125	3868
19	23.279		VV	6471	1148
20	23.452		VV	26487	5095
21	23.629		VV	49668	11799
22	23.797		VV	14660	3391
23	23.965		VV	324204	62285
24	24.064		VV	105355	27202
25	24.145		VV	146194	28168
26	24.395		VV	503721	111232

Sample Name=950414-18 1/400

0 to 30.0 min. Low Y=126.876 High Y=397.961 mv Span=271.085



***** MARYLAND SPECTRAL SERVICES, INC. *****

* SAMPLE NAME: 950414-18 1/400

* ANALYSIS DATE: Apr 18, 1995 14:57:23

* OPERATOR: KD

* INSTRUMENT ID: GC-B--ECD

* METHOD FILE: C:\DIRECT\DATAB1\RUN.MET

* RAW DATA FILE NAME: C:\DIRECT\DATAB1\0417B.40R

* RUN TIME: 30

* DILUTION FACTOR: 1

RTX-35 30m x 0.25mm 2uL INJ

* AMOUNT INJECTED: 1

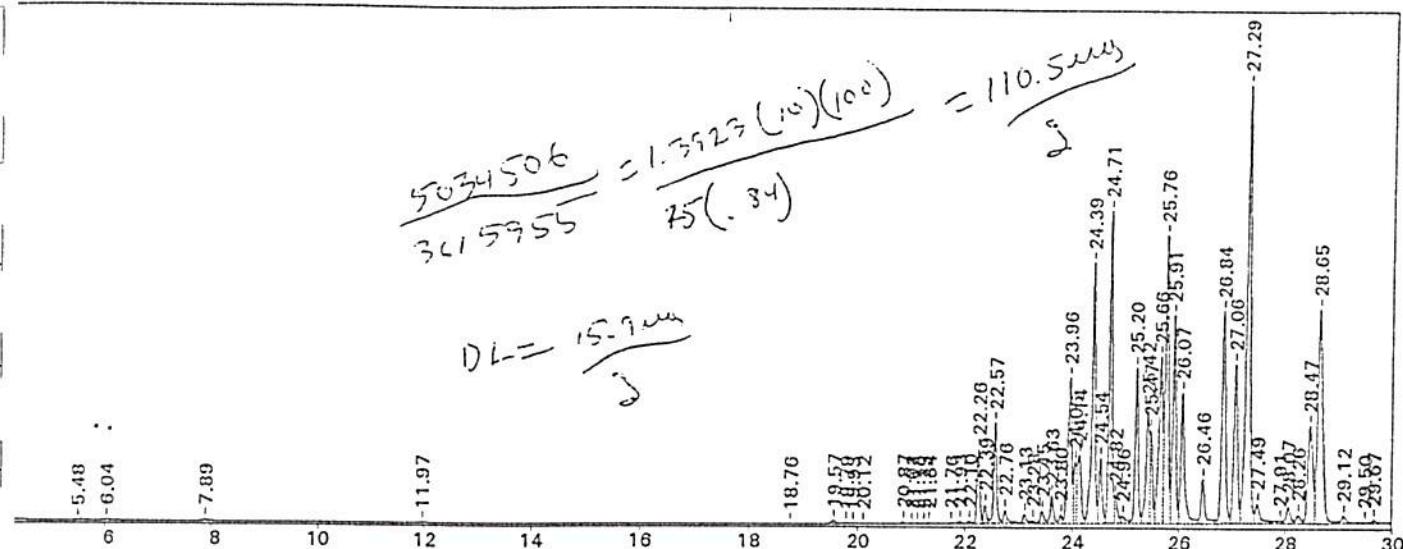
PCB BY 8080 MODIFIED

***** PEAKS DETECTED IN THIS CHROMATOGRAM *****

Peak #	Ret Time (min)	Compound Name	Peak Type	Peak Area	Peak Height
1	4.413		BB	12720	515
	5.269		BB	2388	414
	6.040		BB	26746	2637
4	7.888		BB	135185	16882
5	10.996		BB	3710	408
6	11.964		BB	29714	3944
7	17.393		BB	2539	253
8	18.758		BB	819	141
9	19.567		BV	24426	4776
10	19.798		VV	6501	1129
11	19.928		VV	1878	410
12	20.057		VB	1125	234
13	20.868		BV	10111	2305
14	21.015		VB	2022	540
15	21.414		BB	61337	5198
16	21.761		BV	5123	1424
17	21.929		VB	22042	5791
18	22.103		BV	14531	4122
19	22.263		VV	205790	56123
20	22.393		VV	40309	11376
21	22.573		VV	260573	70115
22	22.765		VV	23404	6558
23	22.836		VB	7905	2534
24	23.128		BV	19618	5136
25	23.278		VV	2916	806
26	23.452		VV	28678	6393

Sample Name=950414-19 1/100

0 to 30.0 min. Low Y=126.285 High Y=557.62 mv Span=431.335



***** MARYLAND SPECTRAL SERVICES, INC. *****

SAMPLE NAME: 950414-19 1/100

* ANALYSIS DATE: Apr 18, 1995 11:36:19

* OPERATOR: KD

INSTRUMENT ID: GC-B--ECD

METHOD FILE: C:\DIRECT\DATAB1\RUN.MET

* RAW DATA FILE NAME: C:\DIRECT\DATAB1\0417B.34R

RUN TIME: 30

^ DILUTION FACTOR: 1 RTX-35 30m x 0.25mm 2uL INJ

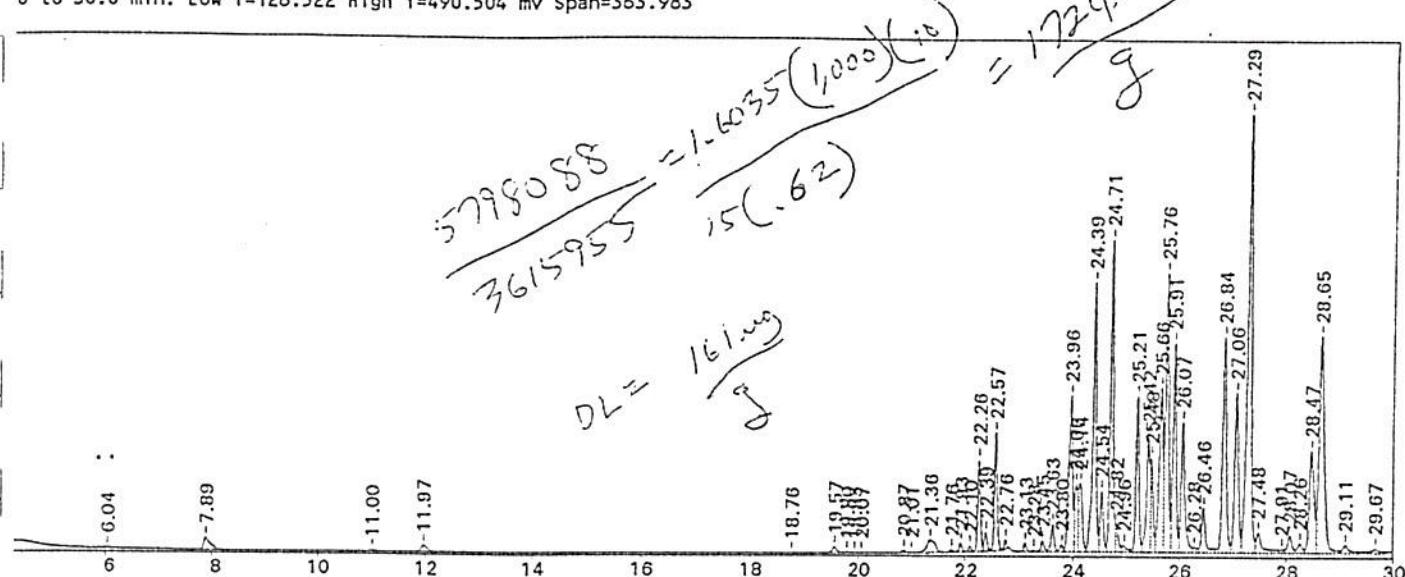
* AMOUNT INJECTED: 1 PCB BY 8080 MODIFIED

***** PEAKS DETECTED IN THIS CHROMATOGRAM *****

Peak #	Ret Time (min)	Compound Name	Peak Type	Peak Area	Peak Height
1	5.482		BB	3360	315
2	6.042		BB	11178	910
	7.889		BB	11544	1307
4	11.967		BB	6219	763
5	18.760		BB	617	99
6	19.567		BV	13397	2635
7	19.795		VV	2910	546
8	19.928		VB	990	236
9	20.116		BB	420	86
10	20.866		BV	6928	1451
11	21.016		VV	1821	403
12	21.127		VV	1467	376
13	21.246		VV	1626	413
14	21.337		VB	1855	489
15	21.761		BV	2095	405
16	21.925		VV	7587	1500
17	22.104		VV	9012	2233
18	22.262		VV	222576	60499
19	22.392		VV	55238	14965
20	22.571		VV	316080	81411
21	22.764		VV	52139	10559
22	23.120		VV	34866	7439
23	23.276		VV	10678	2074
24	23.452		VV	50178	9971
25	23.628		VV	89623	22361
26	23.797		VV	28220	6737

Sample Name=950414-20 1/1,000

0 to 30.0 min. Low Y=126.522 High Y=490.504 mv Span=363.983



***** MARYLAND SPECTRAL SERVICES, INC. *****

SAMPLE NAME: 950414-20 1/1,000

* ANALYSIS DATE: Apr 18, 1995 14:24:22

+ OPERATOR: KD

INSTRUMENT ID: GC-B--ECD

- METHOD FILE: C:\DIRECT\DATAB1\RUN.MET

* RAW DATA FILE NAME: C:\DIRECT\DATAB1\0417B.39R

RUN TIME: 30

* DILUTION FACTOR: 1

RTX-35 30m x 0.25mm 2uL INJ

* AMOUNT INJECTED: 1

PCB BY 8080 MODIFIED

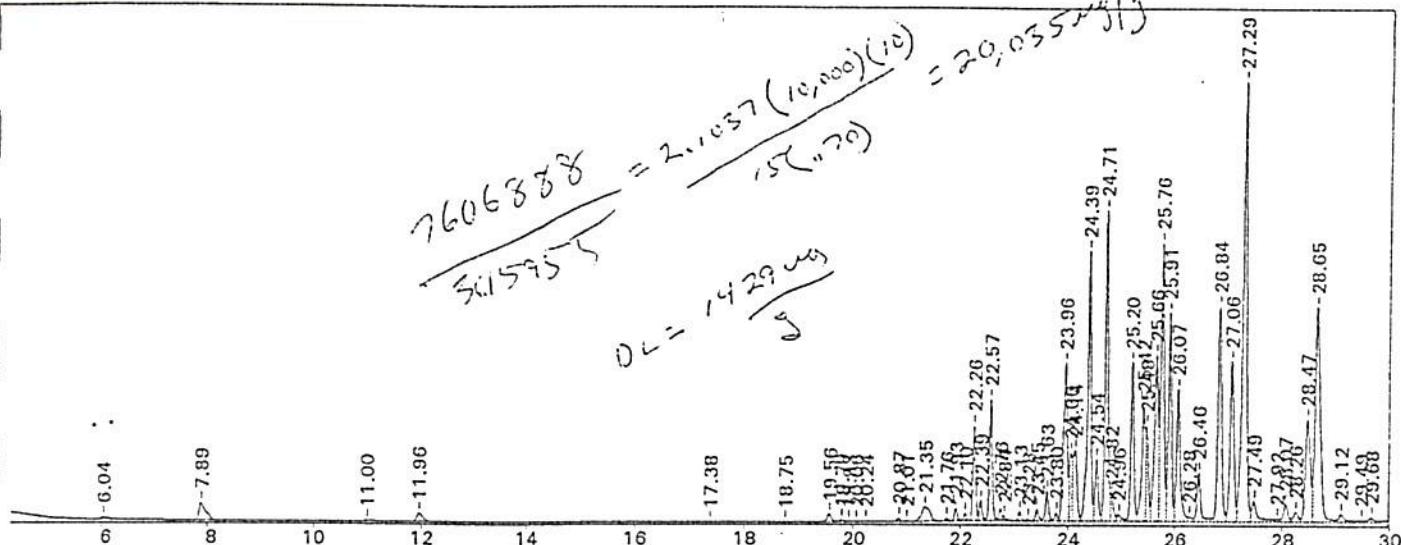
***** PEAKS DETECTED IN THIS CHROMATOGRAM *****

Peak #	Ret Time (min)	Compound Name	Peak Type	Peak Area	Peak Height
1	6.038		BB	8597	673
	7.891		BB	69677	8085
	11.002		BB	3806	401
4	11.966		BB	34459	4540
5	18.756		BB	499	87
6	19.567		BV	20911	4104
7	19.797		VV	4594	822
8	19.929		VV	1514	342
9	20.066		VB	975	163
10	20.867		BV	8988	1795
11	21.014		VV	2031	449
12	21.360		VB	95022	8341
13	21.760		BV	5537	1562
14	21.929		VB	22878	6166
15	22.102		BB	13976	4010
16	22.262		BV	234250	63655
17	22.393		VV	45639	13112
18	22.572		VB	295111	81722
19	22.764		BB	18090	6295
20	23.127		BV	20748	5610
21	23.280		VV	2691	820
22	23.451		VV	31498	7393
23	23.628		VV	74356	19381
24	23.796		VV	18234	4862
25	23.963		VV	562536	108390
26	24.064		VV	175207	46844

File=C:\DIRECT\DATAB1\0417B.38R Date printed=04-18-1995 Time= 13:51:22

Sample Name=950414-21 1/10,000

0 to 30.0 min. Low Y=125.464 High Y=687.469 mv Span=561.823



***** MARYLAND SPECTRAL SERVICES, INC. *****

SAMPLE NAME: 950414-21 1/10,000

* ANALYSIS DATE: Apr 18, 1995 13:51:20

OPERATOR: KD

INSTRUMENT ID: GC-B--ECD

METHOD FILE: C:\DIRECT\DATAB1\RUN.MET

* RAW DATA FILE NAME: C:\DIRECT\DATAB1\0417B.38R

RUN TIME: 30

* DILUTION FACTOR: 1 RTX-35 30m x 0.25mm 2uL INJ
* AMOUNT INJECTED: 1 PCB BY 8080 MODIFIED

***** PEAKS DETECTED IN THIS CHROMATOGRAM *****

Peak #	Ret Time (min)	Compound Name	Peak Type	Peak Area	Peak Height
1	6.039		BB	23566	1822
	7.888		BB	155810	18542
	10.997		BB	1798	401
4	11.963		BB	65265	8719
5	17.380		BB	3750	331
6	18.754		BB	1285	209
7	19.565		BV	40895	7895
8	19.795		VV	10066	1764
9	19.926		VV	3579	749
10	20.060		VV	2133	365
11	20.237		VB	1085	165
12	20.866		BV	14367	3424
13	21.014		VB	3084	812
14	21.350		BB	163404	14755
15	21.760		BV	11690	3219
16	21.928		VV	49171	12960
17	22.101		VV	28853	8094
18	22.262		VV	370948	100878
19	22.391		VV	76853	21632
20	22.572		VV	472736	129029
21	22.764		VV	44767	12472
22	22.836		VB	14111	4597
23	23.127		BV	34452	9418
24	23.278		VV	4770	1380
25	23.450		VV	51137	12042
26	23.628		VV	123099	32296

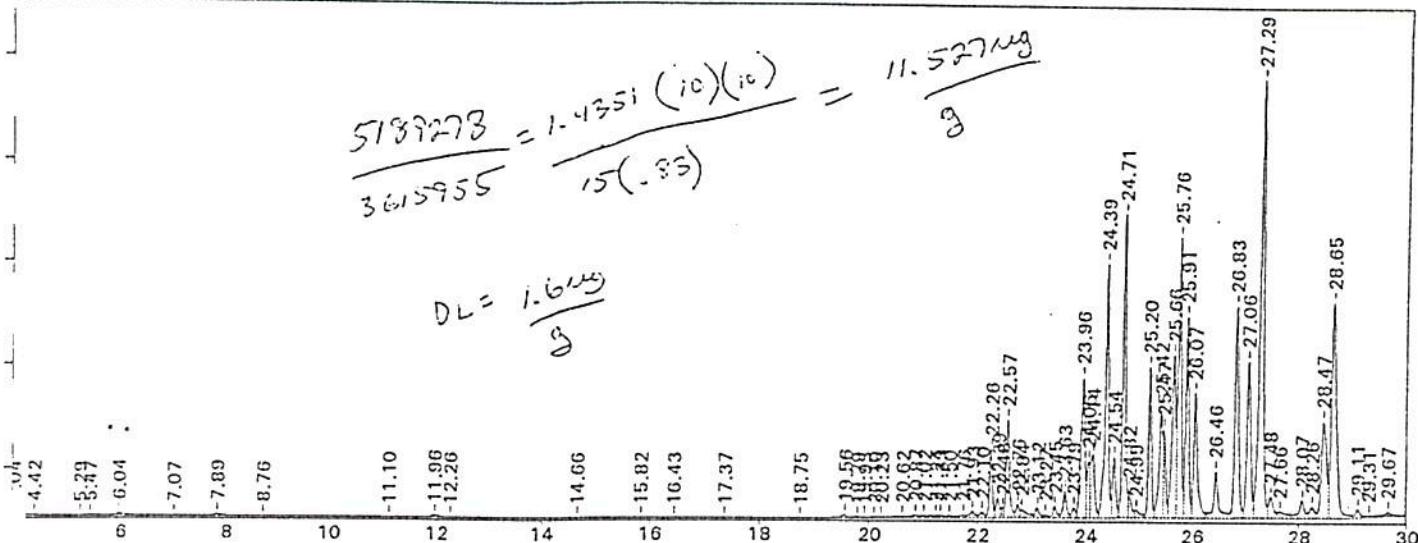
Sample Name=950414-22 1/10

0 to 30.0 min. Low Y=125.395 High Y=715.554 mv Span=590.159

0 fm

$$\frac{5139273}{3615955} = \frac{1.4751}{15(-.85)} = \frac{(ic)(ic)}{g} = \frac{11.527149}{g}$$

$$DL = \frac{1.6145}{g}$$



***** MARYLAND SPECTRAL SERVICES, INC. *****

SAMPLE NAME: 950414-22 1/10

* ANALYSIS DATE: Apr 18, 1995 09:52:30

* OPERATOR: KD

INSTRUMENT ID: GC-B--ECD

METHOD FILE: C:\DIRECT\DATAB1\RUN.MET

* RAW DATA FILE NAME: C:\DIRECT\DATAB1\0417B.31R

+ RUN TIME: 30

DILUTION FACTOR: 1

RTX-35 30m x 0.25mm 2uL INJ

* AMOUNT INJECTED: 1

PCB BY 8080 MODIFIED

***** PEAKS DETECTED IN THIS CHROMATOGRAM *****

Peak #	Ret Time (min)	Compound Name	Peak Type	Peak Area	Peak Height
1	4.041		BV	1748	217
,	4.418		VB	1754	243
	5.286		VB	1132	142
4	5.474		VB	5664	496
5	6.041		VB	20960	1717
6	7.070		VB	2885	252
7	7.887		BB	18191	2023
8	8.756		BB	787	80
9	11.103		BB	1316	196
10	11.963		BV	19378	2395
11	12.260		VB	2594	241
12	14.656		BB	530	62
13	15.824		BB	1631	237
14	16.430		BB	752	83
15	17.366		BB	1071	97
16	18.754		BB	580	102
17	19.563		BV	18847	3690
18	19.793		VV	6050	1034
19	19.927		VV	2364	414
20	20.100		VV	3474	447
21	20.233		VV	1993	363
22	20.619		VV	16561	1009
23	20.866		VV	28715	3157
24	21.019		VV	12589	2000
25	21.242		VV	24817	2149
26	21.335		VV	19090	2410

